

a second covering layer in planar contact with the soundproofing layer.

2. The heat-insulating and soundproofing lining of claim 1, wherein the duroplastic foam layer has a long-term thermal stability up to 180°C and a thickness of less than 5 mm.

10. The heat-insulating and soundproofing lining of claim 1, wherein the plastic foam of the soundproofing layer has a volumetric weight from about 6 to about 30 kg/m³.

11. The heat-insulating and soundproofing lining of claim 1, wherein the particle composite foam of the soundproofing layer has a volumetric weight from about 30 kg/m³ to about 250 kg/m³.

12. The heat-insulating and soundproofing lining of claim 1, wherein the nonwoven fabric of the soundproofing layer has a volumetric weight from about 800 g/m² to about 2000 g/m².

13. The heat-insulating and soundproofing lining of claim 1, wherein the soundproofing layer has a thickness of less than 20 mm.

14. The heat-insulating and soundproofing lining of claim 13, wherein the soundproofing layer has a thickness of less than 10 mm.

15. The heat-insulating and soundproofing lining of claim 1, wherein at least one of the duroplastic foam layer and the soundproofing layer has a grid-like shaping.

16. The heat-insulating and soundproofing lining of claim 1, wherein the grid-like shaping is near a boundary surface of the at least one layer.

17. The heat-insulating and soundproofing lining of claim 1, further comprising a metal foil in planar contact with the first covering layer.

20. A method for manufacturing a heat-insulating and soundproofing lining for the engine compartment of a motor vehicle, comprising:

providing a first covering layer;
providing a duroplastic foam layer on the first covering layer, wherein the duroplastic foam layer has a long-term thermal loadability at 200°C of three weeks;
providing a soundproofing layer on the first covering layer;
providing a second covering layer;
pressing the layers together at an increased temperature and an increased pressure.

22. The method of claim 20, further comprising providing a metal foil in planar contact with the first covering layer.

23. The method of claim 20, wherein the duroplastic foam layer has a long-term thermal stability up to 180°C and a thickness of less than 5 mm.

24. The method of claim 20, wherein the soundproofing layer is selected from the group consisting of plastic foam, particle composite foam, and a non woven fabric consisting at least one of natural fibers and synthetic fibers.

REMARKS

Claims 1-24, as amended, appear in this application for the Examiner's review and consideration. Claims 1, 2, 10-17, 20, and 22-24 have been amended to more particularly point out the claimed subject matter and to correct inadvertent minor spelling and editorial errors, but no new matter has been added. Claim 1 has been amended to recite a duroplastic foam layer has a long-term thermal loadability at 200°C of three weeks. The amendments to claims 1 and 17 are supported in claim 2 and the specification at p. 6, l. 14, and at p. 8, ll. 14-21, respectively. The amendments to claims 20 and 22 are supported in claim 23 and the specification at p. 8, ll. 14-21, respectively. The amendment to claim 24 is supported by the specification at p. 6, l. 14.

The revised PTO-1449 form listing two (2) references together with a copy of each of the cited references is submitted in response to the comments on page 2 of the Office Action. Applicants submit an English language abstract with each reference. The English language abstract was obtained from the European Patent Office website at ep.espacenet.com.